



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,676	04/14/2004	Jurgen Kuss	9243.0218-01	4882
22852	7590	12/14/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,676

Applicant(s)

KUSS ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-54 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 27-54 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/2/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 27-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as originally filed, does not provide support for the claimed subject matter of a sheath or an outer sheath comprising a halogen-free fire resistant mixture as now claimed in claims 27 and 43.

Claims 28-42 and 44-54 are included in this rejection because of dependency.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 43, 44, 49 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al. (3,576,940).

Stone et al. discloses an electrical cable and an inherent method for making an electrical cable, comprising forming at least one core comprising forming on a conductor (10) a first insulation layer, a second insulation layer, and a sheath (15) comprising a halogen-free fire resistant mixture (re claim 43). Stone et al. also discloses the first insulation layer comprising silicone rubber compound (re claim 44), forming the first insulation layer on the conductor and forming the second insulation layer on the first layer (re claim 49), forming the second insulation layer on the conductor and forming the first insulation layer on the second insulation layer (re claim 50).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al.

Stone et al. discloses the invention substantially as claimed except for the first and second layers being extruded on the conductor simultaneously. Although not specifically disclosed by Stone et al., it would have been obvious to one skilled

in the art to form the first and second layers of Stone et al. by simultaneously extruding the layers on the conductor since this method of forming insulating layers on a conductor is well-known in the art.

8. Claims 27, 29, 32, 35, 40-42, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of Figure 3 (Applicant Admitted Prior Art).

Stone et al. discloses an electrical cable having at least one core (10) including a conductor and an insulation surrounding the conductor which is copper (re claim 42), the insulation comprising at least two insulation layers, a first insulation layer comprising a silicone rubber compound and a second insulation layer. Stone et al. does not disclose the second insulation layer comprising a copolymer or terpolymer or hardgrade EPR. Figure 3 discloses an electrical cable having an insulation layer comprising consisting of hardgrade-EPR (see specification, page 3, lines 23-30). It would have been obvious to one skilled in the art to use hardgrade-EPR for the second insulation layer of Stone et al. since hardgrade-EPR has good insulation properties and strength as disclosed by Figure 3 (re claims 27, 29, 46 and 47).

The modified cable of Stone et al. also discloses the second insulation layer being arranged on the conductor and the first insulation layer being arranged on the second insulation layer (re claim 32). The modified cable of Stone et al. would allow the cable to conform with a burn test according to the German DIN standard and can be used as a communication cable or a power cable since it comprises structure and material as claimed in claim 27 (re claim 35, 40, 41).

9. Claims 28 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of Figure 3 as applied to claim 27 above, and further in view of DE 44 37 596 (DE'596).

Claims 29 and 36 additionally recite the silicone rubber compound of the first insulation layer comprising a hard ash. DE'596 discloses the use of a hard ash forming silicone rubber which is a fire resistant mixture. It would have been obvious to one skilled in the art to use the hard ash taught by DE'596 in the first insulation layer of Stone et al. to provide fire resistance properties for the cable.

10. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of Figure 3 as applied to claim 27 above, and further in view of Figure 5 (Applicant Admitted Prior Art).

Claims 37-39 additionally recite a plurality of said insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. Figure 5 discloses a cable comprising a plurality of insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. It would have been obvious to one skilled in the art to surround a plurality of the modified insulated conductors of Stone et al. with an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath as taught by Figure 5 to provide a multi-core cable for multiple transmission purposes.

11. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of DE 44 37 596 (DE'596).

Claim 45 additionally recites the silicone rubber compound of the first insulation layer comprising a hard ash. DE'596 discloses the use of a hard ash forming silicone rubber which is a fire resistant mixture. It would have been obvious to one skilled in the art to use the hard ash taught by DE'596 in the first insulation layer of Stone et al. to provide fire resistance properties for the cable.

12. Claims 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figure 5 (Applicant Admitted Prior Art).

Claims 53 and 54 additionally recite a plurality of said insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. Figure 5 discloses a cable comprising a plurality of insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. It would have been obvious to one skilled in the art to surround a plurality of the modified insulated conductors of Stone et al. with an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath as taught by Figure 5 to provide a multi-core cable for multiple transmission purposes.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214

USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 30, 31, 33, 34 and 48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 13-16 of U.S. Patent No. 6,781,062 (Kuss et al.) in view of Stone et al.

Claims 1 and 13-16 of Kuss et al. discloses the invention substantially as claimed except for an outer sheath comprising a halogen-free fire resistant mixture. Stone et al. discloses a cable comprising an outer sheath (15) comprising a halogen-free fire resistant mixture. It would have been obvious to one skilled in the art to use the outer sheath as taught by Stone et al. in the cable of Kuss et al. to provide the cable with flame resistant property.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831